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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/016,964  
Filing Date: 12/14/2001  
Appellant(s): Riedel et al.

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**Supplemental  
EXAMINER'S ANSWER**

This is in response to the appeal brief filed on 07/13/2007.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments***

The appellant's statement of the status of amendments contained in the brief is correct.

**(5) *Summary of claimed subject matter***

The summary of claimed subject matter contained in the brief is correct.

**(6) *Grounds of Rejection to be Reviewed on Appeal***

The appellant's statement of the issues in the brief is correct.

(a) *Grounds of Rejection Withdrawn*

Appellant's arguments with respect to the rejection of claim 42 under 35 U.S.C. 102(b) as being anticipated by Marilyn (WO 92/16188, PTO-1449) have been considered, and found persuasive. Therefore, the said rejection is withdrawn.

(b) Grounds of Rejection to be Reviewed on Appeal:

The rejection of claims 18-22, 28-33, 35, 42-43 under 35 U.S.C. 102(b) as being anticipated by Beutler et al. (US 4,808,388, PTO-1449).

The rejection of claim 42 under 35 U.S.C. 102(b) as being anticipated by Penksa et al. (EP 0 938 890, PTO-1449, IDS filed on 06/20/2006).

The rejection of claims 18-24, 28-31, 34, 36-39, 42, 43 under 35 U.S.C. 103(a) as being unpatentable over Bellon et al. (FR 2,789,397 with English translation of record).

The rejection of claims 25-27, 32, 33, 40, 41 under 35 U.S.C. 103(a) as being unpatentable over Bellon et al. as applied to claims 18-24, 28-31, 34, 36-39, 42, 43 above, and further in view of Synder (4,708,813).

The rejection of claim 35 under 35 U.S.C. 103(a) as being unpatentable over Bellone et al. as applied to claims 18-24, 28-31, 34, 36, 37-39, 42, 43 above, in view of Saint-Leger et al. (5,939,077).

The provisional rejection of claims 18-41 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-34, 43 of Application 10/469695; claims 16-31, 34-35, 45, 47, 48.of 10/469696; claims 17-32, 35-36, 47-48 of Application 10/469697; claims 14-29, 32-33, 42, 43 of Application 10/469698; claims 13-28, 31-32, 40 of Application 10/469074.

The provisional rejection of claim 42 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-17 of Application 10/760088.

**(7) *Claims Appendix***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied upon**

US 4,808,388	Beutler et al.	February 28, 1989
EP 0 938 890	Penksa et al.	January 09, 1999
FR 2,789,397	Bellon et al.	August 11, 2000
US 4,708,813	Snyder	November 24, 1987
US 5,939,077	Saint-Leger et al.	August 17, 1999

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-22, 28-33, 35, 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Beutler et al. (US 4,808,388, PTO-1449).

Beutler et al. discloses foamable cosmetic creams for application onto the skin, comprising oil-in-water emulsion. The composition or preparation therein comprises 2 to 9 % by weight of emulsifying agent such as PEG glycerol stearate, PEG 9-stearate, ceteareth-12 (PEG-12-cetyl stearyl ether), and mixtures thereof; 0.5 to 4.5

% by weight of consistency-providing agent, a combination of cetearyl alcohol and stearic acid; 4.5 to 21 % by weight of oil portion selected from fatty substances such as vegetable and mineral oil, liquid fatty alcohols, and liquid waxes; and gases such as N2O, CO2. See column 2, lines 3-10; lines 28-50. A composition comprising 2.0 % by weight of ceteareth-12 (PEG-12-cetyl stearyl ether), 1.0 % by weight of cetearyl alcohol, and 2.5 % by weight of stearic acid, and 2 to 3.2 % by weight of a gas such as N2O, CO2 is disclosed. See Example 7/2; column 20, claims 1-4. The composition therein comprises a total of 2.5 % to 13.5 % by weight of polyethoxylated fatty acid esters, cetearyl alcohol, and stearic acid. A method of preparing said compositions is also taught.

Thus, Beutler et al. anticipates instant claims 18-22, 28-33, 35, 42-43.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 42 is rejected under 35 U.S.C. 102(b) as being anticipated by Penksa et al. (EP 0 938 890, PTO-1449, IDS filed on 06/20/2006).

Penksa et al. discloses skin care compositions containing a liquid, inert, hydrofluorocarbon infused with carbon dioxide. The compositions therein comprise 3 %

by weight of stearic acid, 0.5 % by weight of cetyl alcohol, 0.5 % by weight of peg-100 stearate. See paragraphs [0016], [0019], [0072] to [0073], EXAMPLES 6-7. The method of preparing said compositions is also disclosed.

Thus, Penksa et al. anticipates instant claim 42.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-24, 28-31, 34, 36-39, 42, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellon et al. (FR 2,789,397 with English translation of record).

Bellon et al. exemplify a facial foam composition or preparation comprising 22% PEG-100 stearate glyceryl stearate which is a polyethoxylated fatty acid ester in the instant claim 18 (I)-B: stearate having a chain 18 carbons and 100 of ethoxylation; 12% stearic acid which is a fatty acid in the instant claim 18 (I)-A: stearic acid having a chain 18 carbons; 6% octyldodecanol, which is a fatty alcohol in the instant claim 1 (I)-C having a chain 20 carbons; nitrogen added to the composition in 70% by volume which is one gas in claim 18 (II). See Example 1 and Table 1 (at page 10-11 and 16 of the English translation). The claims therein recite a method of caring for skin comprising

applying the composition to the skin. Bellon et al. disclose that the lipid phase in Example 1 which is phase A, is 40.7% of total weight which is obtained from the sum total of phase A (see page 11). Fatty acids such as stearic acid, myristic acid, acids of lauric, cetyl, palmitic, oleic are taught. It is also taught that lipophilic phase that includes the fatty acids represent 30 % of the lipophilic mass, and this lipophilic phase represents 5 % to 25 % by weight of the total composition. See page 5 of the English translation. A gas such as air, nitrogen in the amount of 10 to 90 % by volume of the composition is taught. See page 5 of the English translation. The compositions therein possess properties such as light appearance, good spreading power, quick penetration during use, non-greasy and non-sticky sensation to the skin after application. See page 4 of the English translation. The compositions therein can comprise additional emulsifiers such as for example glycerol stearate. See page 13, Example 2. See Example 3, wherein PEG-7 glycerylcocoate is present in an amount of 2.0 %.

Bellon et al. lacks a specific exemplification, wherein the total amount of emulsifiers A, B, and C is from 2 % to 20 % by weight as in claims 18, 42; from 5 % to 15 % as in claims 28 and 37; and from 8 % to 13 % by weight as in claim 29. Bellon et al. do not expressly disclose a ratio of a:b:c of 1:1:1.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to optimize the total amounts of a, b, and c, and a ratio of a:b:c of 1:1:1.

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to exemplify a composition wherein the total amount of emulsifiers

A, B, and C is from 2 % to 20 % by weight as in claims 18, 42; from 5 % to 15 % as in claims 28 and 37; from 8 % to 13 % by weight as in claim 29, using the teachings of Bellon et al. with the expectation of achieving a cosmetically acceptable form of a foam that has a light texture and does not leave a residual greasy or sticky film.

Moreover, the optimization of the ratio of a:b:c based on the prior art teachings, is considered well within conventional skills in pharmaceutical science, involving merely routine skill in the art.

It has been held that it is within the skill in the art to select optimal parameters, such as amounts of ingredients, in a composition in order to achieve a beneficial effect. See *In re Boesch*, 205 USPQ 215 (CCPA 1980).

The recitation "wherein the preparation comprises up to 30 % by weight, based on a total weight of the preparation, of a lipid phase comprising one or more nonpolar liquids", and "wherein the preparation comprises up to 40 % by weight, based on a total weight of the preparation, of a lipid phase, of polar liquids" in claims 19-20 reads on 0 % weight of nonpolar liquids, and polar liquids.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-27, 32, 33, 40, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellon et al. as applied to claims 18-24, 28-31, 34, 36-39, 42, 43 above, and further in view of Synder (4,708,813).

Bellon et al. is applied as discussed above.

The reference lacks a hydrophilic emulsifier.

Bellon et al. does not teach the particular alcohols such as cetyl alcohol, and stearyl alcohol in the composition therein.

Synder teaches a nonlathering cleansing mousse with skin conditioning benefits. Sorbitan monostearate is taught as a surfactant that provides skin cleansing benefits and imparts a uniform dispersion of emollient and other ingredients in the composition. Surfactants are disclosed as comprising 1.5-15% of the composition. See abstract; Col. 4, line 26-Co1. 5, line 24. Fatty alcohol foam modifiers, which are C12-C22 saturated chain fatty alcohols, for example cetyl alcohol, stearyl alcohol, lauryl alcohol, and mixtures thereof are taught. It is taught that these fatty alcohol enhance the stability of the mousse, and provide emollient effect on the skin. The fatty alcohols are present in an amount of 1 % to about 4 % in the composition. See column 3, lines 30-45.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the sorbitan monostearate of Synder to the composition of Bellone et al. because of the expectation of achieving a composition with greater skin cleansing benefits and which imparts uniformity to the emulsion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ fatty alcohols such as cetyl alcohol, stearyl alcohol in the composition of Bellone et al.

One of ordinary skill in the art would have been motivated to employ cetyl alcohol, stearyl alcohol as fatty alcohols with the expectation of obtaining a stable composition which provides emollient effect on the skin as taught by Synder.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellone et al. as applied to claims 18-24, 28-31, 34, 36, 37-39, 42, 43 above, in view of Saint-Leger et al. (5,939,077).

Bellone et al. is applied as discussed above. The reference lacks carbon dioxide.

Saint-Leger et al. teach cosmetic compositions. Carbon dioxide and nitrogen are taught as interchangeable gases that are used in producing cosmetic foams. See Col. 4, lines 7-15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the nitrogen of Bellone et al. for carbon dioxide because Saint-Leger et al. teach carbon dioxide and nitrogen as equivalent gases for use in producing cosmetic foams.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims

are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-41 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-34, 43 of Application 10/469695; claims 16-31, 34-35, 45, 47, 48 of 10/469696; claims 17-32, 35-36, 47-48 of Application 10/469697; claims 14-29, 32-33, 42, 43 of Application 10/469698; claims 13-28, 31-32, 40 of Application 10/469074. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are drawn to a cosmetic or dermatological preparation comprising emulsifiers A, B, C, wherein the total weight % of emulsifiers A, B, and C is 2 to 20 % by weight, and 1% to 90 % by volume of a gas, and the claims of '695, '696, '697, '698, '074 are drawn to a cosmetic or dermatological composition comprising emulsifiers A, B, C, and 1 % to 90 % by volume of a gas.

Applications '695, '696, 697, 698, 074 lack a specific exemplification, wherein the total amount of emulsifiers A, B, and C is from 2 % to 20 % by weight based on the total weight of the preparation. It would have been obvious to a person of ordinary skill in the

art at the time the invention was made to optimize the amounts and a ratios of A:B:C of 1:1:1 with the expectation of achieving a cosmetically acceptable form of a foam that has a light texture and does not leave a residual greasy or sticky film.

Therefore, the instant claims 18-41 are seen to be obvious over the claims of application '695, '696, '697, '698, '074.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 42 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-17 of Application 10/760088. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are drawn to a method of preparing a self-foaming cosmetic or dermatological preparation comprising a gaseous ingredient, and emulsifiers A, B, C, wherein the total weight % of emulsifiers A, B, and C is 2 to 20 % by weight, and the claims of '088 are drawn to a method of producing a foamable cosmetic or dermatological composition comprising combining a gaseous ingredient with emulsifiers A, B, C, and a gaseous ingredient.

Application '088 lacks a specific exemplification, wherein the total amount of emulsifiers A, B, and C is from 2 % to 20 % by weight based on the total weight of the preparation. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to optimize the amounts and a ratios of A:B:C of 1:1:1 with

the expectation of achieving a cosmetically acceptable form of a foam that has a light texture and does not leave a residual greasy or sticky film.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**(10) Response to Argument**

The Rejection of Claims 18-22, 28-33, 35, 42-43 under 35 U.S.C. 102(b) as being anticipated by Beutler et al. (US 4,808,388, PTO-1449) should be affirmed.

Appellant argues that "Even if one were to assume, *arguendo*, that a combination of Examples 7/2 and 4/2 of BEUTLER is able to anticipate a preparation which comprises emulsifiers A to C, it is not seen that BEUTLER contains any disclosure which in combination with Example 7/2 thereof predominantly relied on by the Examiner necessarily results in a total concentration of emulsifiers A to C of from 2 % to 20 % by weight. See page 15, and pages 29-30 of the Brief.

In response, it is pointed out that Beutler et al. discloses broadly self foaming and/or foam-like cosmetic compositions or preparation comprising 2 to 9 % by weight of nonionic emulsifying agents such as PEG glyceryl stearate, PEG 9-stearate, and mixtures thereof; 0.5 to 4.5 % by weight of consistency-providing agent, a combination of cetearyl alcohol and stearic acid; and gases such as N2O, CO2. Beutler et al. discloses several specific examples. See column 2, lines 3-10; lines 28-50; see Example 4/2, where in PEG 9-stearate is employed as a nonionic emulsifying agent; see Example 7/2 wherein a combination of stearic acid and cetearyl alcohol are employed as consistency providing agent. Beutler et al. in Example 5/1a and Example 5/1b also discloses a composition comprising 5 % by

weight of TEA-Stearate (Triethanolamine Stearate) i.e wholly or partially neutralized fatty acid instant emulsifier A, 0.5 % by weight of polysorbate 20 (PEG 20 sorbitan monolaurate) i.e instant emulsifier B, and 1 % by weight of cetyl alcohol i.e instant emulsifier C, and N2O or CO2 as the gas. The total concentration of emulsifiers A to C in Examples 5/1a and 5/1b is between 2 % to 20 % by weight, which meets the instant claims. See Examples 5/1a and Example 5/1b, column 13-14. Thus, Beutler et al. clearly anticipates instant claims 18-22, 28-33, 35, 42-43.

Appellant argues that the "Examiner has not pointed to any composition of BEUTLER of which it can reasonably be assumed that it would not be self-foaming and/or foam-like if it did not contain a combination of emulsifiers A to C (in a total amount of from 2 % to 20 % by weight). This is yet another reason why the Examiner has failed to establish that BEUTLER anticipates claim 42." See page 15-page 16 of the Brief.

In response, it is pointed out that the Examiner need not point out any composition of BEUTLER which would not be self-foaming and/or foam-like if it did not contain a combination of emulsifiers A to C. It is pointed out that the instant claim 42 is drawn to a method of preparing cosmetic or dermatological preparation which comprises gaseous ingredient and wherein the method renders the preparation self-self-foaming and/or foam like by incorporating a total of from 2 % to 20 % by weight emulsifiers A to C. Beutler et al. discloses several self foaming and/or foam-like cosmetic compositions or preparation comprising the instantly claimed combination

of emulsifiers, and a gas such as N2O or CO2, and renders the preparation self-foaming and/or foam-like. Thus, Beutler et al. clearly anticipate instant claim 42.

Appellant argues that "it is not seen that BEUTLER contains any disclosure which in combination with Example 7/2 thereof predominantly relied on by the Examiner necessarily results in all weight ratios of emulsifiers A to C being not higher than 5 : 1 and not lower than 1 : 5..... in all weight ratios of emulsifiers A to C being not higher than 3 :1 and not lower than 1:3. See pages 28-29 of the Brief.

In response, it is pointed out that Beutler et al. discloses broadly self foaming and/or foam-like cosmetic compositions or preparation comprising 2 to 9 % by weight of nonionic emulsifying agents such as PEG glyceryl stearate, PEG 9-stearate, and mixtures thereof; 0.5 to 4.5 % by weight of consistency-providing agent, a combination of cetearyl alcohol and stearic acid; and gases such as N2O, CO2. Thus, the compositions taught by Beutler encompass the instantly claimed weight ratios, and meet the instant claims 21-22.

The Rejection of claim 42 under 35 U.S.C. 102(b) as being anticipated by Penksa et al. (EP 0 938 890, PTO-1449, IDS filed on 06/20/2006) should be affirmed.

Appellant argues that "PENSKA does not indicate how much carbon dioxide the emulsions of Examples 6 and 7 contain. Further, PENSKA does not appear to indicate that any of the compositions disclosed therein (all of which contain a fluorocarbon infused with carbon dioxide) forms a foam." See page 16 of the Brief.

In response, it is pointed out that Penksa discloses compositions comprising the same ingredients as instantly claimed. Penksa et al. disclose a preparation comprising a gaseous ingredient such as 50 % by weight perfluorodecane infused with CO<sub>2</sub> gas, 3 % by weight of stearic acid, 0.5 % by weight of cetyl alcohol, 0.5 % by weight of peg-100 stearate. Further, see paragraph [0019] of Penksa et al wherein it is disclosed that the fluorocarbon in the compositions therein carries most preferably 140 to 250 % its volume in carbon dioxide at 37 °C. Accordingly, the compositions which contain the same ingredients in the same amounts as instantly claimed disclosed by Penksa et al. would inherently render the preparation self-foaming and/or foam-like as instantly claimed.

For the above stated reasons, said claims are properly rejected under 35 U.S.C. 102(b). Therefore, said rejection is adhered to.

Rejection of claims 18-24, 28-31, 34, 36-39, 42, 43 under 35 U.S.C. 103(a) as being unpatentable over Bellon et al. (FR 2,789,397 with English translation of record) should be affirmed.

Appellant argues that “the substance used in Example 1 of BELLON is not merely PEG-100 stearate, but PEG-100 stearate glyceryl stearate, the specific structure of which is unknown to Appellants.” See page 20 of the Brief.

In response, it is pointed out that PEG-100 stearate glyceryl stearate is a polyethoxylated fatty acid ester, PEG-100 refers to polyethylene glycol comprising 100 ethylene glycol units. The structure of PEG-100 stearate glyceryl stearate is

$C_{17}H_{35}-COO(CH_2CH_2O)_{100}(CH_2-CH(OH)-CH_2-OOCC_{17}H_{35})$ . Thus, PEG-100 stearate glyceryl stearate taught by BELLON in Example 1 reads on instant emulsifier B which is a polyethoxylated fatty acid ester.

Appellant argues that "the fact remains that the total concentration of emulsifiers A to C according to Example 1 of BELLON is 22 % + 12 % + 6 % = 40 %. Even if it is taken into account that the total concentrations indicated in Example 1 Bellon add up to a little over 120 %, the total concentration of emulsifiers A to C, normalized to 100 % would still be about 33 %; i.e., more than one and a half times the total concentration of 20 % by weight recited in present independent claims 18 and 42, and more than twice the total concentration of 15 % by weight recited in present independent claim 37." See page 20, and 31-33 of the Brief.

In response, it is pointed out that Bellon et al. teach that lipophilic phase that includes the fatty acids represents 5 % to 25 % by weight of the total composition. Bellon et al. exemplify a facial foam composition or preparation comprising 22% non-ionic emulsifier, PEG-100 stearate glyceryl stearate which is a polyethoxylated fatty acid ester, 12% stearic acid which is a fatty acid, 6% octyldodecanol. Bellon et al. in addition to the face care foam in Example 1, Bellon also discloses shaving foam in Example 3 comprising 12.00 % by weight of stearic acid i.e instant emulsifier A, 2.0 % by weight of non-ionic emulsifier, PEG-7 glycerylcocoate i.e instant emulsifier B, 4.0 % by weight of decylglucoside i.e instant coemulsifier C, and nitrogen. Bellon et al. teach that the total concentration of emulsifiers A to C in Example 3 is about 18 %, and thus meets the instant total concentration of 2-20 % by weight as in instant claims 18 and 42. It is pointed out that Bellon et al. disclose a substantially similar

emulsifier system to the one claimed herein having all three essential ingredients. As shown by the Examples in Bellon the amounts of A, B, and C can be varied to obtain the desired benefits. Thus, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to exemplify a composition wherein the total amount of emulsifiers A, B, and C is from 5 % to 15 % as in claims 28 and 37; from 8 % to 13 % by weight as in claim 29, because Bellon et al, teach that lipophilic phase that includes the fatty acids represents preferably from 5 % to 25 % by weight of the total composition. Thus, there is clear motivation to optimize parameters such as A, B, and C to obtain the composition with beneficial properties.

Further, the concentration of each individual emulsifier, and the total concentration by weight of all three emulsifiers in the compositions of Bellon et al., these parameters are considered to be result effective variable that would have been routinely optimized by one of ordinary skill in the art at the time of invention was made with the expectation of achieving a cosmetically acceptable form of a foam that has a light texture and does not leave a residual greasy or sticky film. It is well known in the art of cosmetic formulations the concentration of each individual emulsifier that one would employ depends on the HLB values of the emulsifier i.e the number of ethylene glycol units, the length of carbon chain on the fatty acid etc. The concentration of the emulsifiers directly effect the final physical properties of the foam such as foam stiffness, emulsion stability, wetting properties etc. Accordingly, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to manipulate the concentration of emulsifiers based on the fact

that these parameters are recognized as result effective and would have been routinely optimized to obtain a cosmetically acceptable form of a foam.

Finally, it is pointed out that the optimization of the amounts of the emulsifiers in a cosmetic composition, is considered well within conventional skills in cosmetic science, involving merely routine skill in the art. It has been held that it is within the skill in the art to select optimal parameters, such as amounts of ingredients for example emulsifiers, in a composition in order to achieve a beneficial effect. See *In re Boesch*, 205 USPQ 215 (CCPA 1980).

Appellant argues that "it is not seen that BELLON provides any indication that the presence of the alleged emulsifiers A to C is critical for rendering the composition of Example 1 of BELLON self-foaming and/or foam-like." See pages 23-24 of the Brief.

Bellon et al. teaches a composition comprising the same emulsifiers and a gas as in instant claims. Bellon et al. discloses shaving foam in Example 3, comprising 12.00 % by weight of stearic acid i.e instant emulsifier A, 2.0 % by weight of non-ionic emulsifier, PEG-7 glycerylcocoate i.e instant emulsifier B, 4.0 % by weight of decylglucoside i.e instant coemulsifier C, and nitrogen. Accordingly, the compositions which contain the same ingredients in the same amounts as instantly claimed disclosed by Bellon et al. would render the preparation self-foaming and/or foam-like as instantly claimed.

Rejection of claims 25-27, 32, 33, 40, 41 under 35 U.S.C. 103(a) as being unpatentable over Bellon et al. as applied to claims 18-24, 28-31, 34, 36-39, 42, 43 above, and further in view of Synder (4,708,813) should be affirmed.

Appellant argues that "BELLON is directed to compositions in the form of a foam (see, e.g., claims of BELLON). In contrast, SNYDER is directed to non-lathering compositions (see, e.g., title of SNYDER)", and thus Bellon in view of Synder does not render the subject matter of claims 25-27, 32, 33, 40, 41 obvious. See page 25 of the Brief.

In response, it is pointed out that Synder has been cited for its teachings that sorbitan monostearate is a known emulsifier as a surfactant that provides skin cleansing benefits and imparts a uniform dispersion of emollient and other ingredients in the composition. Sorbitan monostearate is known to be used in many known skin cleansing compositions or products. Surfactants are disclosed by Synder as comprising 1.5-15% of the composition in a cleansing mousse with skin conditioning benefits. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the sorbitan monostearate of Synder to the composition of Bellone et al. because of the expectation of achieving a composition with greater skin cleansing benefits and which imparts uniformity to the emulsion. Thus, Bellon et al. in view of Synder has clearly provided the knowledge which was generally available, and within the level of ordinary skill at the time, and render the subject matter of claims 25-27, 32, 33, 40, 41 obvious.

Appellant argues that "essential component of the compositions of BELLON is a fatty acid (see, e.g., claim 2 and page 5, last paragraph of BELLON). SNYDER on the other hand, does not even appear to mention fatty acids." See page 25 of the Brief.

In response, it is pointed out that as discussed above Synder's reference was employed for its teachings that fatty alcohols and fatty acid esters of sorbitan are well known to be used in skin care products and provide skin cleansing benefits. Synder's reference need not mention fatty acids.

Appellant argues that "sorbitan and sorbitol are apparently not the same. This is yet another reason why BELLON in View of SNYDER fails to render obvious claims 26 and 41. See page 26 of the Brief.

In response, it is pointed out that Snyder's reference was employed for its teachings that fatty acids of sorbitol or dehydration products of sorbitol such as sorbitan are employed as surfactants in the compositions of Snyder. See column 5, lines 53-61 of Snyder, wherein is taught that fatty acid esters of sorbitol or sorbitan are employed in as surfactants. Thus, the surfactants taught by Synder meet the broad recitation of hydrophilic emulsifiers in instant claims 25, 40, and also the narrow limitation i.e fatty acids esters of sorbitol as in instant claims 26 and 41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the sorbitan monostearate or fatty acid esters of sorbitol of Synder to the composition of Bellone et al. because of the expectation of achieving a composition with greater skin cleansing benefits and which imparts uniformity to the emulsion.

Rejection of claim 35 under 35 U.S.C. 103(a) as being unpatentable over Bellon et al. as applied to claims 18-24, 28-31, 34, 36, 37-39, 42, 43 above, in view of Saint-Leger et al. (5,939,077) should be affirmed.

Appellant's arguments with respect to the rejection of claim 18 as being unpatentable over Bellon et al. are unpersuasive as discussed above.

It is further pointed out that, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the nitrogen of Bellon et al. for carbon dioxide because Saint-Leger et al. teach carbon dioxide and nitrogen as equivalent gases for use in producing cosmetic foams.

The provisional rejection of claims 18-41 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-34, 43 of Application 10/469695; claims 16-31, 34-35, 45, 47, 48 of 10/469696; claims 17-32, 35-36, 47-48 of Application 10/469697; claims 14-29, 32-33, 42, 43 of Application 10/469698; claims 13-28, 31-32, 40 of Application 10/469074 should be affirmed.

The provisional rejection of claim 42 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-17 of Application 10/760088 should be affirmed.

Note that appellant did not present any arguments on these provisional obviousness-type double patenting rejections. Appellant merely recites that "Appellants will address this provisional rejection once the Board has rendered a decision on the above issues 1 to 6".

The nonstatutory obviousness-type double patenting rejections should be affirmed as discussed under Grounds of Rejection.

For the above stated reasons, said claims are properly rejected under 35 U.S.C. 103(a). Therefore, said rejection is adhered to.

**(11)        *Related Proceedings Appendix***

None

Respectfully submitted,

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